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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,426	04/01/2002	Naoki Yasuda	401527	8792

23548 7590 12/19/2002

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EXAMINER

METZMAIER, DANIEL S

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/19/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/030,426

Applicant(s)

YASUDA ET AL.

Examiner

Daniel S. Metzmaier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

Claims 1-14 are pending. Form PCT/DO/EO/905 has been entered as Paper No. 2. The declaration and letter filed April 1, 2002 has been entered as Paper No. 3. Form PCT/DO/EO/903 has been entered as Paper No. 4. The preliminary amendment filed June 10, 2002 has been entered as Paper No. 5. Claims 1 and 3-14 were amended in said amendment.

#### ***Priority***

1. A certified copy of the priority document has not been received in this national stage application from the International Bureau (PCT Rule 17.2(a)), submitted under 35 U.S.C. 119(a)-(d). A document, which does not contain the WIPO certification stamp is in the file.

#### ***Drawings***

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the following figure designations fail to have corresponding descriptions in the specification, "2a", "5" and "15". Correction of the specification will obviate this objection.

Reference characters "A" and "IIIB" have both been used to designate the "cross-sectional view" in figure 3A". Applicants have amended the specification at page 5, line 9, without a corresponding change to the drawings.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

4. Page 34 of the specification has been corrupted in processing. The examiner requests a copy of said page 34 to complete the file.
5. The following figure designations fail to have corresponding descriptions in the specification, "2a", "5" and "15".

The Brief description of the drawings indicates the cross-sectional view is along "IIIB-IIIB" while the drawing and the specification at page 27, lines 20, sets forth line "A-A".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, "the cured polymer film" lacks antecedent basis in claim 1.

Claim 6 is indefinite since l, m, and n are integers and at least 0 (zero). It is unclear what is the polymer when l, m, and n are zero. Claim 7 has a similar issue. It is suggested applicants employ the language, "a positive integer".

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-4, 8-9 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Murata MFG. Co. Ltd, JP 8-78755, as evidenced by the machine translation corresponding to JP 08-78755 obtained from the Japan Patent Office (<http://www1.ipdl.jpo.go.jp/PA1/cgi-bin/PA1DETAIL>) and Derwent Abstract 1996-214884.

Murata MFG (abstract and paragraphs [0010], [0011] and [0013]) discloses magnetoresistance sensors employing polymer resins between the substrate and the wiring. Murata MFG teaches multi-layer polymers employing polyimide as 3 and pasted up 3a with polymers such as epoxy polymers. Murata MFG ([0013]) teaches the further layering of polyimide with application and heat.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 5-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata MFG. Co. Ltd, JP 8-78755, as evidenced by the machine translation corresponding to JP 08-78755 obtained from the Japan Patent Office (<http://www1.ipdl.jpo.go.jp/PA1/cgi-bin/PA1DETAIL>) and Derwent Abstract 1996-214884, further in view of Mitsubishi Electric Corp, JP 10 103597 as evidenced by the machine translation corresponding to JP 10-103597 obtained from the Japan Patent Office (<http://www1.ipdl.jpo.go.jp/PA1/cgi-bin/PA1DETAIL>) and Derwent Abstract 1999-085809.

Murata MFG discloses sensors as set forth in the above anticipation rejection which is incorporated herein by reference. Murata MFG differs from the claims in the particular polymer employed in the sensor of claims 5 and 6 and the use of a photo cured polymer. Murata MFG teaches the use of photolithography to form layer 2.

Mitsubishi (title and abstract) disclose photosensitive silicone ladder polymers for use in semiconductor applications. Mitsubishi (Derwent) teaches the polymers advantageously have good stability and are rapid forming.

These references are combinable because they teach semiconductor manufacturing and sensors employing semiconductors. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the polymers of Mitsubishi in the sensors of Murata MFG for the advantages taught in Mitsubishi.

#### ***Allowable Subject Matter***

13. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or fairly suggest the multi-layered silicone polymers having the molecular weights claimed.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier

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communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on (703) 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Daniel S. Metzmaier  
Primary Examiner  
Art Unit 1712

DSM  
December 16, 2002